



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,402	03/29/2004	DahShiarn Chiao		3200

7590 07/22/2010
David O'Neill
786 Townsend Avenue
New Haven, CT 06512

EXAMINER

BOECKMANN, JASON J

ART UNIT	PAPER NUMBER
----------	--------------

3752

MAIL DATE	DELIVERY MODE
-----------	---------------

07/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,402	Applicant(s) CHIAO ET AL.	
	Examiner Jason J. Boeckmann	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-20, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ring being in the form of an annular cable, of claim 18, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference number 21 does not appear in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The following terms are not found in the specification and must be added in order to provide proper antecedent basis for claims:

- "a housing having a first end and a second end, the first end comprising a handle for a user to grasp during spraying" of claims 17 and 23,

- “positioned near the second end of the housing” of claims 17 and 23,

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the housing enclosing the at least one reservoir " in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim. It is unclear if this limitation is referring to the housing of line 3 of claim 17, which appears to be element 10 in the figures, or the housing that surrounds the reservoir, that the ring (50) is mounted on, which appears to be element 21 or 22 in the figures. If the above term is referring to the housing of line 3 of claim 17, (element 10 in the figures) then the housing having a first end and a second end must be shown with the ring being mounted to it. If the term is referring to the housing that the ring is mounted to (element 21 or 22 in the figures), then proper antecedent basis is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 19 and 23 are rejected, and claims 18 and 22 are rejected as best understood, under 35 U.S.C. 102(b) as being anticipated by Noakes et al. (5,121,884).

Noakes et al. shows a portable handheld electrostatic spraying device comprising: a housing (2) having a first end and a second end, the first end comprising a handle (4) for a user to grasp; a high voltage generator (26) having a high voltage output; at least one dispensing nozzle (12) positioned near the second end of the housing, at least one reservoir (14), a tube (22, 20) connecting the at least one dispensing nozzle and the at least one reservoir, the tube configured to convey the materials to be sprayed from the at least one reservoir to the at least one dispensing nozzle, means coupling (32) the high voltage output of the high voltage generator to the materials so that the voltage is conducted through the materials to the materials present at the at least one dispensing nozzle, at least one ring (60) surrounding the at least one dispensing nozzle, the at least one ring coupled to the high voltage generator (via the housing), the at least one ring configured to develop a high voltage of the same polarity

Art Unit: 3752

as that applied to the materials being sprayed and to generate an electric field in the vicinity of the at least one dispensing nozzle (column 5, lines 42-55).

It is noted that the last paragraph of the claim is being considered a functional recitation of the intended use of the claimed invention that occurs when the claimed invention is operated. Since no specific structure is being claimed in that last paragraph that causes the electrostatic spraying device to impart an electrostatic charge to the materials issuing from the at least one nozzle to focus the material being sprayed and to generate an iontophoresis effect to enhance material transport through skin when a forward extremity of the ring is brought within a distance of 2 cm of the skin of an earthed subject to be sprayed, and the device of Noakes includes all structural elements of the claimed invention; therefore, the device of Noakes is inherently capable of performing the intended use recitations of the last paragraph of the claim when it forward extremity of the ring is brought within a distance of 2 cm of the skin of an earthed subject.

Regarding claim 18, as best understood, it is noted that the ring (60) of the Noakes reference is as much of an annular cable as the ring (50) of the present invention is an annular cable (see the figures). Therefore, the examiner is considering the ring 60 of Noakes to be structurally equivalent to the annular cable of the claimed invention.

Regarding claim 19, the means for supplying the materials to the nozzle passively is the trigger 46.

Regarding claim 22, as best understood, the at least one ring is made of an electrically semi-insulating material (the non conducting material and the conductive charge that deposits on the ring makes up a semi-insulating material), and since it is charged with the same voltage as the material to be dispensed, it forms a potential in a location forward of the nozzle, just as the present invention does.

Regarding claim 23, the replaceable cartridge of the device of Noakes includes: the reservoir 14, that at least one nozzle 12 and tube 22, and the at least one ring 60. It is noted that these elements are all removable and replaceable.

Response to Arguments

Applicant's arguments with respect to claims 17-19, 21 and 23 have been considered but are moot in view of the new ground(s) of rejection.

Please see the new rejections above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Boeckmann whose telephone number is (571)272-2708. The examiner can normally be reached on 8:00- 5:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/817,402
Art Unit: 3752

Page 9

/Jason J Boeckmann/
Examiner, Art Unit 3752
7/20/2010